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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
CHUONG, TRUC T	
ART UNIT	**PAPER NUMBER**
2179	

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/804,309	MCCLELLAN, JAMES R.	
	Examiner	Art Unit	
	Truc T. Chuong	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 September 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This communication is responsive to RCE, filed 09/06/05.

Claims 1-26 are pending in this application. In the communication, claims 1, 7, 10, 14, and 20-26 are independent claims. This action is made non-final.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

Claim Rejections - 35 USC § 102

1. Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Habegger (U.S. Patent No. 6,643,642 B1).

As to claim 1, Habegger teaches method for generating an enhanced tree-style graphical representation of interrelationships among a plurality of machine vision entities for display as a graphical user interface on a screen of a visual display unit of a machine vision system, said method comprising:

acquiring a first specification that describes a plurality of hierarchical interrelationships among said plurality said of machine vision entities (e.g., fig. 6 shows a plurality of machine nodes/entities and graphical hierarchical interrelationships among machine nodes/entities such as devices, software, tools, hardware, etc.; e.g., col. 7 lines 1-40), the first specification being for constructing a tree-style graphical representation of the hierarchical interrelationships among said plurality of machine vision entities (e.g., col. 5 lines 25-36, and fig. 6);

acquiring a second specification that describes a plurality of non-hierarchical data flow interrelationships among said plurality of entities (nodes are related by both hierarchical and

non-hierarchical relationships, e.g., col. 1 lines 52-63, and col. 7 lines 1-40), the second specification being for enhancing the tree-style graphical representation by adding non-hierarchical data flow interrelationships among the plurality of machine vision entities (dashed line 606b shows a cross-linked relationship between that data nodes which are located in different hierarchies, e.g., col. 7 lines 29-40);

constructing said enhanced tree-style graphical representation simultaneously representing graphically both said set of hierarchical interrelationships and said plurality of non-hierarchical data flow interrelationships among said plurality of machine vision of entities (fig. 6 and col. 7 lines 1-40); and

displaying said enhanced tree-style graphical representation to produce said graphical user interface on said screen of said visual display unit of said machine vision entities (fig. 6).

As to dependent claim 2, Habegger teaches the acquiring a first specification includes at least one of:

extracting said first specification from a digital file stored on a computer readable medium (The invention also provides database systems and methods, which exploit relationships between the data stored in a database, e.g., col. 9 lines 8-14); and

obtaining said first specification from an interactive graphical user interface (the user interface for presentation to a user, the search engine retrieves the unique identifiers from all of the data nodes that are hierarchically below the first data nodes, e.g., col. 2 lines 51-61).

As to dependent claim 3, Habegger teaches the acquiring a second specification includes at least on of:

extracting said second specification from a digital file stored on a computer-readable medium (nodes are related by both hierarchical and non-hierarchical relationships, e.g., col. 1 lines 52-63, and col. 7 lines 1-40); and

Obtaining said second specification from an interactive graphical user interface (dashed line 606b shows a cross-linked relationship between that data nodes which are located in different hierarchies, e.g., col. 7 lines 29-40).

As to dependent claim 4, Habegger teaches the constructing enhanced tree-style graphical representation further comprises:

forming an initial tree-style graphical representation that depicts said set of hierarchical interrelationships among said plurality of machine vision entities (fig. 6); and

incorporating said plurality of non-hierarchical data flow interrelationships into said initial tree-style graphical representation, by depicting said plurality of non-hierarchical data flow interrelationships without altering said plurality of hierarchical interrelationships depicted in said initial tree-style graphical representation, to produce said enhanced tree-style graphical representation (note the rejection of claim 1 above, fig. 6).

As to dependent claim 5, Habegger teaches the forming includes graphically depicting a hierarchical interrelationship between a parent entity and a child entity in such a manner that the child entity in said hierarchical interrelationship appears left-indented from where the parent entity in said hierarchical interrelationship appears (elements 604k and 604n of fig. 6).

As to dependent claim 6, Habegger teaches the incorporating includes graphically displaying a data flow connection between two machine vision entities involved in any one of said plurality of non-hierarchical interrelationships data flow interrelationships proximate to

where said two machine entities appear in said initial tree-style graphical representation (e.g., col. 1 lines 52-63, and fig. 6).

As to claim 7, Habegger teaches a method for modifying an enhanced tree-style graphical representation of interrelationships among a plurality of machine vision entities for display as a modified graphical user interface on a screen of a visual display unit of a machine vision system, said method comprises at least one of:

adding a new machine vision entity to the depiction of said enhanced tree-style graphical representation that depicts simultaneously hierarchical interrelationship among said machine vision entities, and non-hierarchical data flow interrelationships among said machine vision entities (the user interface 102 also presents the searchable terms of the new subset of data nodes in the hierarchy, from the perspective of the new target data nodes, e.g., col. 6 lines 2-8); and

deleting a depicted machine vision entity from the depiction of said enhanced tree-style graphical representation that depicts simultaneously hierarchical interrelationships among said machine vision entities, and non-hierarchical data flow interrelationships among said machine vision entities (by changing search terms from Broader Terms (BTs), any number of Narrower Terms (NTs), some database engines can be excluded or included during searching, e.g., col. 6 lines 16-30).

As to dependent claim 8, Habegger teaches said adding further comprises:

defining said new machine vision entity (e.g., some database engine can be excluded or included during searching, e.g., col. 6 lines 16-30);

specifying a position in said enhanced tree-style graphical representation where said new machine vision entity can be inserted (e.g., col. 6 lines 16-30, fig. 6);

modifying said enhanced tree-style graphical representation to incorporate said new machine vision entity at said position (e.g., col. 6 lines 16-30, fig. 6); and

displaying said enhanced tree-style graphical representation, modified by said modifying to produce said modified graphical user interface on said screen of said display unit of said machine vision entities (e.g., col. 7 lines 1-40).

As to dependent claim 9, Habegger teaches said deleting further comprises:

selecting said depicted machine vision entity from said enhanced tree-style graphical representation (e.g., col. 7 lines 1-40, and fig. 6);

identifying any hierarchical interrelationship and any non-hierarchical interrelationship, associated with said depicted machine vision entity (nodes are related by both hierarchical and non-hierarchical relationships, e.g., col. 1 lines 52-63, and col. 7 lines 1-40);

modifying said enhanced tree-style graphical representation to incorporate the deletion of said depicted machine vision entity and the removal of said any hierarchical interrelationship and any non-hierarchical interrelationship, identified by said identifying (e.g., col. 6 lines 32-61); and

displaying said enhanced tree-style graphical representation, modified by said modifying to produce said modified graphical user interface on said screen of said display unit of said machine vision system (e.g., col. 7 lines 1-40, and fig. 6).

As to claim 10, Habegger teaches a method for modifying an enhanced tree-style graphical representation of interrelationships among a plurality of machine vision entities for display as a graphical user interface on a screen of a visual display unit of a machine vision system, said method comprises at least one of:

adding a new hierarchical interrelationship to the depiction of said enhanced tree-style graphical representation that depicts simultaneously hierarchical relationships, and non-hierarchical data flow interrelationships among a plurality of machine vision entities (dashed line 606b shows a cross-linked relationship between that data nodes which are located in different hierarchies, e.g., col. 7 lines 29-40);

deleting a depicted hierarchical interrelationship from the depiction of said enhanced tree-style graphical representation that depicts simultaneously hierarchical interrelationships, and non-hierarchical data flow interrelationships among a plurality of machine vision entities (e.g., col. 6 lines 32-61); and

updating a depicted hierarchical interrelationship in the depiction of said enhanced tree-style graphical representation that depicts simultaneously hierarchical interrelationships and non-hierarchical data flow interrelationships among a plurality of machine vision entities (by changing search terms from Broader Terms (BTs), any number of Narrower Terms (NTs), some database engines can be excluded or included during searching, e.g., col. 6 lines 16-30).

As to dependent claim 11, it is the equivalent method claim 8 and rejected under a similar rationale.

As to dependent claims 12 and 13, they are the equivalent method claim 9 and rejected under a similar rationale.

As to claim 14, Habegger teaches a method for modifying an enhanced tree-style graphical representation of interrelationships among a plurality of machine vision entities for display as a modified graphical user interface on a screen of a visual display unit of a machine vision system, said method comprises at least one of:

adding a new non-hierarchical data flow interrelationship to the depiction of said enhanced tree style graphical representation (dashed line 606b shows a cross-linked relationship between that data nodes which are located in different hierarchies, e.g., col. 7 lines 29-40);

deleting a depicted non-hierarchical data flow interrelationship from the depiction of said enhanced tree-style graphical representation (fig. 6);

updating a depicted non-hierarchical data flow interrelationship in the depiction of said enhanced tree-style graphical representation (fig. 6).

As to dependent claims 15 and 16, they are the equivalent method claim 9 and rejected under a similar rationale.

As to dependent claim 17, Habegger teaches the method wherein said updating further comprises:

selecting said depicted non-hierarchical data flow interrelationship from said enhanced tree style graphical representation (dashed line 606b shows a cross-linked relationship between that data nodes which are located in different hierarchies, e.g., col. 7 lines 29-40);

revising the specification associated with said depicted non-hierarchical data flow interrelationship to produce a modified non-hierarchical data flow interrelationship (fig. 6);

modifying said enhanced tree-style graphical representation to replace said depicted non-hierarchical data flow interrelationship by said modified non-hierarchical data flow interrelationship (dashed line 606b shows a cross-linked relationship between that data nodes which are located in different hierarchies, e.g., col. 7 lines 29-40); and

displaying said enhanced tree-style graphical representation, modified by said modifying to produce said modified graphical user interface on said screen of said display unit of said machine vision system (e.g., col. 7 lines 29-40, and fig. 6).

As to dependent claim 18, it can be rejected under a similar rationale as claim 1, and e.g., fig. 6.

As to dependent claim 19, it can be rejected under a similar rationale as claim 1.

As to claims 20-23, they are the equivalent method claims 1, 7,10, and 14 respectively and are rejected under a similar rationale.

As to claims 24-26, they are the equivalent method claims 1, 2, and 13 respectively and are rejected under a similar rationale.

Response to Arguments

2. Applicant's arguments filed 09/06/05 have been fully considered but they are not persuasive.

Applicants argued and Examiner disagrees with the following reasons:

a. *Habegger is silent on any teaching of "machine vision entities."*

Habbegger clearly teaches in figs. 6 and 7A-B that different application visions shown as nodes on the hierarchical and non-hierarchical relationships of the particular software or folders, i.e., Education Programs including different application visions/folders such Paint, Draw, Art Progs, Typing Progs, are grouped under the same tree supporting the main software; therefore, the software

and its applications as shown in fig. 6 are similar to the "machine vision entities" as shown in fig. 3a of the Applicant's specification.

b. Habegger does not teach plurality of non-hierarchical data flow interrelationships.

Habegger teach hierarchical relationships among software and applications shown as nodes (fig. 6, and Summary), which mean the particular node being related to other nodes that are hierarchical above; therefore, data can be shared or flowed under the same tree. Moreover, Habegger clearly teach the nodes are related by both hierarchical and non-hierarchical relationships (e.g., Summary), so the data in each node of Habegger can be either related or non-related from each other. For example, the non-hierarchical 602k and 602e of fig. 6 contain data are NOT related until the data-link-flow 606a causes the linking information data (data can be flowed now) between nodes 602k and 602e. A similar example can be found between 602d and 602l with the data-link-flow 606b (e.g., fig. 6 and col. 7 lines 30-41).

c. Habegger does not teach display or construct of an enhance tree-style graphical representation.

Fig. 6 provides a logical representation of a hierarchical data map, which is generated based on the contents of each data node (col. 7 lines 1-40); therefore, the any change to the nodes such as adding, deleting, or upgrading, etc., will appear on the hierarchical map (fig. 6) reflecting the new changes. This explanation can also be applied and overcome to the Applicant's argument that

the structure (hierarchical map) is already exists because the map can always change and update to reflect its current condition. Habergger also teaches that the user interfaces with the hierarchical data map to signal the search engine to retrieve documents from the data storage system. By way of example, the user may select a data node via the user interface. In response, the search engine retrieves from the data storage system those records encoded with the unique identifier of the selected data node. The user interface presents the user with the retrieved records, along with a subset of the data nodes that may be, for example, hierarchically above or below the selected data node, or contextually related in some fashion to the selected data node (e.g. col. 2 line 63-col. 3 line 8); therefore, fig. 6 of Habergger clearly provides the user interface(s) displaying both hierarchical and non-hierarchical nodes with the data flow relationships and the whole hierarchical map (fig. 6) reflecting the new changes as shown with the dash-line 606a and 606b.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Truc T. Chuong whose telephone number is 571-272-4134. The examiner can normally be reached on M-Th and alternate Fridays 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Truc T. Chuong

11/25/05

BA HUYNH
PRIMARY EXAMINER